



STATE OF WASHINGTON

## STATE BUILDING CODE COUNCIL

### Washington State Energy Code Development Standard Energy Code Proposal Form

Jan 2022

Log No. 21-GP3-017

Code being amended: ☐ Commercial Provisions ☒ Residential Provisions

Code Section # R403.5.7

Brief Description:

Deletes Section

Proposed code change text: (Copy the existing text from the Integrated Draft, linked above, and then use underline for new text and ~~strikeout~~ for text to be deleted.)

~~**R403.13 Heat pump space heating.** Space heating shall be provided by a heat pump system.~~

**EXCEPTIONS:**

- ~~1. Detached one- and two-family dwellings and multiple single family dwellings (townhouses up to three stories in height above grade having an installed HVAC heating capacity no greater than 1.5 watts of electric resistance heating per square foot of dwelling unit conditioned floor area, or up to 500 watts, whichever is greater.~~
- ~~2. Group R-2 dwelling or sleeping units having an installed HVAC heating capacity no greater than 750 watts in Climate Zone 4, and 1,000 watts in Climate Zone 5, in any separate habitable room with exterior fenestration are permitted to be heated using electric resistance appliances. For buildings in location with exterior design conditions below 4°F (-15.6°C), an additional 250 watts above that allowed for Climate Zone 5 is permitted.~~
  - ~~2.1. A room within a dwelling or sleeping unit that has two primary walls facing different cardinal directions, each with exterior fenestration, is permitted to have an installed HVAC heating capacity no greater than 1,000 watts in Climate Zone 4, and 1,300 watts in Climate Zone 5. Bay windows and other minor offsets are not considered primary walls. For buildings in location with exterior design conditions below 4°F (-15.6°C), an additional 250 watts above that allowed for Climate Zone 5 is permitted.~~
- ~~3. Resistance heating elements integrated into heat pump equipment.~~
- ~~4. Solar thermal systems.~~
- ~~5. Waste heat, radiant heat exchanger, and energy recovery systems.~~
- ~~6. Supplementary heat in accordance with Section R403.1.2.~~
- ~~7. Where there is no electric utility service available at the building site.~~
- ~~8. Heating systems that rely primarily on biomass are allowed in Climate Zone 5.~~

Purpose of code change:

By prohibiting the use of electric resistance and gas water heating appliances for primary heat, this section runs afoul with EPCA.

June 9, 2023

Your amendment must meet one of the following criteria. Select at least one:

- |   |  |
|---|--|
| <input type="checkbox"/> Addresses a critical life/safety need.   | <input checked="" type="checkbox"/> Consistency with state or federal regulations. |
| <input type="checkbox"/> The amendment clarifies the intent or application of the code.                                     | <input type="checkbox"/> Addresses a unique character of the state.                |
| <input type="checkbox"/> Addresses a specific state policy or statute.<br>(Note that energy conservation is a state policy) | <input type="checkbox"/> Corrects errors and omissions.                            |

Check the building types that would be impacted by your code change:

- |   |   |  |
|---|---|--|
| <input checked="" type="checkbox"/> Single family/duplex/townhome | <input type="checkbox"/> Multi-family 4 + stories | <input type="checkbox"/> Institutional |
| <input checked="" type="checkbox"/> Multi-family 1 – 3 stories    | <input type="checkbox"/> Commercial / Retail      | <input type="checkbox"/> Industrial    |

Your name	Kevin Duell	Email address	kevin.duell@nwnatural.com
Your organization	NW Natural	Phone number	503-610-7990
Other contact name	Ian Casey, NW Natural		

## **Economic Impact Data Sheet**

**Is there an economic impact:** ☒ Yes ☐ No

Briefly summarize your proposal's primary economic impacts and benefits to building owners, tenants, and businesses. If you answered "No" above, explain your reasoning.

This proposal will reduce construction costs by allowing more appliance choices for builders.

Provide your best estimate of the **construction cost** (or cost savings) of your code change proposal? (See OFM Life Cycle Cost [Analysis tool](#) and [Instructions](#); use these [Inputs](#). **Webinars on the tool can be found [Here](#) and [Here](#)**)

\$[Click here to enter text.](#)/square foot (For residential projects, also provide \$[Click here to enter text.](#)/ dwelling unit)

Show calculations here, and list sources for costs/savings, or attach backup data pages

There is insufficient time to provide detailed construction cost calculations for all occupancies.

Provide your best estimate of the **annual energy savings** (or additional energy use) for your code change proposal?

[Click here to enter text.](#)KWH/ square foot (or) [Click here to enter text.](#)KBTU/ square foot

(For residential projects, also provide [Click here to enter text.](#)KWH/KBTU / dwelling unit)

Show calculations here, and list sources for energy savings estimates, or attach backup data pages

Given requirements for Additional Energy Credits, energy savings should be similar to the 2021 WSEC-R.

List any **code enforcement** time for additional plan review or inspections that your proposal will require, in hours per permit application:

***Small Business Impact.*** Describe economic impacts to small businesses:

This should reduce economic impacts to small businesses.

***Housing Affordability.*** Describe economic impacts on housing affordability:

This should reduce economic impacts on housing affordability.

***Other.*** Describe other qualitative cost and benefits to owners, to occupants, to the public, to the environment, and to other stakeholders that have not yet been discussed: